

Introduction

Paddy Bug, *Oebaluspoecilus* also known as 'Ghandi or Stink Bug' is the most serious pest of rice in Guyana. Damages range from 20% - 50%. In fact many farmers paddy have been rejected by millers due to high padi bug damage.

It is therefore important that farmers manage this pest in order to realize greater yield and profit. Understanding the nature of the paddy bug is the first step in the management of this pest, this guide is intended to help you to understand and to manage the paddy bug in an environmentally friendly manner.

Paddy Bug eggs are laid in masses with 2-4 compact parallel rows, typically in barrel shaped and 6-12 eggs in each mass. The female bug lays between 10-200 eggs. Recently oviposited eggs are of green colour and later become transparent and finally attaining a red colour, then they hatch into nymphs which undergo five instar stages before becoming adults. The life span of the adult is about 3-4 weeks.

Development

In laboratory this pest complete one generation in 19-21 days.

Stage of Padi Bug	Period	Colour	Habit
Eggs	3	Light Green (freshly laid) Dark reddish (Hatching)	Masses
Nymphs			
1 st Instar	3	Dark Brown	Aggregate
2 nd Instar	3-4	Reddish Brown	Solitary
3 rd Instar	3	Yellow	Solitary
4 th Instar	4	Yellowish Blue	Solitary
5 th Instar	3-4	Light Green	Solitary

Weed Hosts of Padi bug in Guyana Rice Fields.

Common Name	Botanical Name
Bird seed grass	<i>Echinochloa colonum</i>
Flower grass or monkey tail	<i>E. Crusgalli</i>
Bamboo grass	<i>Hymenachne amplexicaulis</i>
Antelope grass	<i>E. pyramidalis</i>
Sour grass	<i>Paspalum conjugatum</i>
Razor grass	<i>P. Virgatum</i>
Bisi-bisi-grass	<i>Eleochariselegans</i>
Trench weed	<i>Polygonum acuminatum</i>

Damage

Paddy bug feeds on the grain during milky to late dough stages, causing partial or complete abortion of grain and quantity and quality are reduced.

Secondary infestation due to pathogens may also result in grain discoloration.

Monitoring

The incident of the paddy bug can be assessed by sweep netting, during the early morning or late afternoon (before 8:00 hrs and after 16:00 hrs). Monitor fields from 65 days after sowing until grains become hard enough that will prevent further damage.

Control

No single approach can keep the crop free from bugs; hence, the current recommendation for controlling the paddy bug is to use an Integrated Pest Management (IPM) Approach. IPM is the use of suitable techniques/methods in a compatible manner for the control of the pests. Paddy bugs will never be completely eliminated but populations in the field can be maintained at levels not to cause economic damage.

Culture Control

The severity of paddy bug infestations increases in areas where cultivation is staggered.

- Neighboring farmers should plant at the same time.
- Surrounding meres, dams and canals should be clean.
- Fields should be rogued of volunteer rice and red rice.
- Grass weeds provide an alternative food source for bugs.

Biological Control

Paddy bugs are attacked by a wide range of predators, parasitoids and pathogens. Important natural enemies include dragonflies, parasitic wasps, flies and fungal diseases such as *Metarhiziumanisopiae*. Preserve them by spraying only recommended rates of insecticides.

Chemical Control

Spraying is recommended only when the numbers of bugs in a field reaches or exceeds one bug per two sweeps using a sweep net. Spraying should be done early mornings or evenings (before 8:00 hrs and after 16:00 hrs) especially during flowering-spraying when the flower is open may result in an increase in the percentage of 'wind-grains'.

Recommended insecticides are:

Monocrotophos-700ml/ha
(284ml/ac)
Fastac-150-300ml/ha (60-
120ml/ac)
Actara-96g/ha (39g/ac)
Admire-100ml/ha (40ml/ac)
Pilarking-100ml/ha (40ml/ac)
Regent-450ml/ha (180ml/ac)
Pronto-70 WP-25-37g/ha (10-
15g/ac)
Relevo-250-350ml/ha (100-
140ml/ac)

NB: This list is not in order of preference or performance.

Source

Department of Entomology, Rice Research Station, GRDB.



GUYANA RICE DEVELOPMENT BOARD

BURMA RICE RESEARCH STATION



Management of *Oebalusoecilus* (Paddy Bugs)

Rice the Grain of Life



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